



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,364	05/07/2001	Satoru Yamaguchi	461-27	8100

7590 02/13/2003

Nixon & Vanderhye P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

LEYSON, JOSEPH S

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 02/13/2003

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,364

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Joseph Leyson

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1722

1. Figures 7-9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 61. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. Claims 8 and 9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend upon a prior multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 8 and 9 have not been further treated on the merits.
4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1722

5. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 5, "the extrusion outlet" should be changed to --an extrusion outlet--; line 9, "the front part" should be changed to --a front part--; and line 10, "the inlet surface" should be changed to --an inlet surface--, for antecedent basis clarity.

In claim 5, line 3, "the forward end" should be changed to --a forward end--, for antecedent basis clarity.

In claim 6, line 4, "the forward end" should be changed to --a forward end--, for antecedent basis clarity.

In claim 7, line 4, "the foremost axial portion" should be changed to --a foremost axial portion--, for antecedent basis clarity.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1722

7. Claims 1 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Clinefelter(-210).

Clinefelter(-210) teaches an extrusion molding apparatus, that corresponds to the instant apparatus, which includes a mold 27 for molding a molded product, a screw extruder for supplying a material to the mold 27, and a filter unit 12, 23, 24 for filtering the material at an extrusion outlet of the screw extruder, wherein the screw extruder has built therein a screw 13 for kneading while moving the material forward, and has on a front part thereof a spatula portion 15 adapted to move over an inlet surface of the filter unit with a predetermined interval between the spatula portion and the inlet surface (col. 4, lines 5-28). The spatula portion 15 is so configured as to move while rotating over the inlet surface of the filter unit. The spatula portion 15 is extended from a front end of the screw 13 and configured to rotate while moving with the screw (fig. 3). The screw 13 includes a lead portion arranged spirally around an axial member, the lead portion having a forward end thereof forming the spatula portion 15, the spatula portion 15 being configured of a plurality of blades arranged on a foremost axial portion extended from the forward end of the screw 13 (figs. 2 and 3). Furthermore, note the two blade embodiment in figures 5 and 6. Note that recitations, such as "for a ceramic molded

Art Unit: 1722

product", "for molding a ceramic molded product" and "for supplying a ceramic material", relate to the intended use of the apparatus. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, In re Finsterwalder, 168 USPQ 530. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, Ex parte Thibault, 164 USPQ 666. Inclusion of the material worked upon by a structure being claimed does not impart patentability to the claims, In re Otto et al., 136 USPQ 458. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitation of that claimed, Ex parte Masham, 2 USPQ 2d 1647. As to instant claims 4-7, this rejection applies to them when claim 4 is dependent upon claim 1.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

Art Unit: 1722

art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clinefelter(-210).

Clinefelter(-210) discloses the apparatus substantially as claimed as mentioned above, except for specific numerical ranges of the interval between the spatula portion and the inlet surface as recited by the instant claims. However, Clinefelter(-210) discloses that the spatula portion is placed in close proximity to the inlet surface to shear off the material that has already passed through the filtering unit from the rest of the batch which continuously flows such that, while

Art Unit: 1722

the spatula portion imparts rotary motion in addition to a forward pushing movement, every severance will push through the filtering unit material from a different batch, and thus to enable thorough mixing of the different parts of the material and to masticate and break down the material worked on so that it is plasticized and rendered more adaptable for mixing and/or shaping. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the apparatus of Clinefelter(-210) such that the interval is in the range of not more than 30mm or of 0.1 to 30mm because such ranges would have been found due to the teachings of Clinefelter(-210) who discloses that the interval should be close enough to enable thorough mixing of the different parts of the material and to masticate and break down the material worked on so that it is plasticized and rendered more adaptable for mixing and/or shaping. It is not inventive to discover the optimum or workable ranges by routine experimentation, In re Aller, 105 USPQ 233. Furthermore, the specification contains no disclosure of either the critical nature of these dimensional requirements or any unexpected results arising therefrom, and as such these requirements would be arbitrary and therefore obvious. Applicants must show that these requirements are critical. In re Woodruff, 16 USPQ 2d 1934. As to instant claims

Art Unit: 1722

4-7, this rejection applies to them when claim 4 is dependent upon claim 2 or claim 3.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. La Lande, Jr. (-129), Marshall(-033), Selbach(-807), Schaaf(-463), Sato(-203) and Sato(-884) are cited as of interest.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

jl

jl
February 9, 2003

James P. Mackey
JAMES P. MACKEY
PRIMARY EXAMINER

2/10/03